



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

EA

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,755	07/03/2003	Jim Hranica	HON-14852	5555
27504	7590	07/26/2005	EXAMINER	
RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET WILLOUGHBY, OH 44094-7836			DEUBLE, MARK A	
			ART UNIT	PAPER NUMBER
			3651	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/612,755	HRANICA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mark A. Deuble	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-17 is/are allowed.
- 6) Claim(s) 18-21 and 26 is/are rejected.
- 7) Claim(s) 22-25 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)              |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 18-19 and 21 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Conboy et al. (U.S. Patent No. 6,662,076).

Conboy et al. discloses a method of supplying workpieces to a plurality of workstation assemblies 128 in a factory system 130 with a control broker 130. Each workstation assembly includes a variety of storage tools, such as stockers and work-in-process racks, and a variety of processing tools which form the actual workstations. The control broker receives call signals in the form of move requests from all the workstation assemblies of the factory system in the form of move requests (col. 3, ln. 55-56) and it also receives error signals from a database 230 indicating error conditions such as a value indicating that a factory tool is down or inoperable (col. 4, ln. 41-50). While the specification states that the error conditions may be provided in a number of different manners, the error conditions must be sensed at the factory tool of a given workstation assembly so that the error signal must inherently be transmitted from the workstation in some fashion. Furthermore, even if the error signals are not inherently transmitted from the workstation assemblies, it would have been obvious to one of ordinary skill in the art to transmit

the error signals from the workstation assemblies because that is where the errors originate and transmitting the signals from elsewhere would unnecessarily complicate the invention. The control broker directs an automated material handling system (AHMS) to supply the workstation assemblies that have transmitted a call signal from an input area formed by the storage tools. This is done by placing the move request call signals into an active queue that operates in a first-in-first-out fashion (col. 5, ln. 4-6) so that the workpieces are supplied to the workstations based on the chronological order of the receipt of the move request call signals such that the workstation that transmits a first received one of the call signals is supplied with a workpiece first. As this is done, the control broker will check for any error signals associated with a particular workstation tool and may change the destination workstation or cancel the request so that workstations with error signals are not supplied with workpieces. After a workpiece has been moved to a workstation, a confirmation is sent by the workstation and the call signal is removed from the queue so that the next oldest call signal is handled next. Thus, Conboy et al. discloses all the steps required by claims 18-19.

The workstation assemblies 128 may be viewed as being divided into a plurality of zones that each has an equipment interface 126 associated therewith. This means that when the workpieces are supplied to a first processing tool workstation in a first zone in response to a call signal according to the steps described above, they are moved from a first input area formed by a storage tool to the first processing tool workstation associated with the oldest call signal that has not been responded and that is not associated with an error signal. After the workpiece is worked on in the first zone, the workpiece will be moved to a second input area of a downstream workstation in a second zone. The movement of the workpiece through the downstream zones is

determined by call signals from downstream workstations in the fashion described above. This means that the workpieces are moved from the second input area to the second a second processing tool workstations processing tool workstation associated with the oldest call signal that has not been responded and that is not associated with an error signal. After the workpiece is worked on in the second zone, it is moved to a third input area. This process is repeated until the workpiece is completed. Thus, Conboy et al. discloses all the steps required by claim 21.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conboy et al.

While Conboy et al. states that the disclosed method has particular use in a semiconductor fabrication facility; it also includes a more general teaching that the method may be used advantageously in any type of manufacturing facility. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to employ the method of Conboy in an automotive crankshaft manufacturing facility. When this is done, Conboy et al would have all the steps required by claim 20.

*Allowable Subject Matter*

5. Claims 1-17 are allowed.

6. Claims 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bahri et al. and Scotti et al. both employ methods of supplying workpieces in a manufacturing system in a fashion similar to that of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
GENE O. CRAWFORD  
PRIMARY EXAMINER

md